Digital Marketplace:
A Solution of the Imperatives of the CSU

CSU requirements:

1. **Accessibility of academic content**: Instructional and student services content (e.g. academic content formatted in books, journals, guidebooks, websites, multimedia learning objects,) must be in an information format that effectively, efficiently, scaleably, sustainably, and affordably enables renderings that can be used by students and faculty with disabilities in compliance with federal and state laws and CSU executive orders. This content is currently purchased by students and/or the CSU and does not comply with accessibility requirements. Currently the CSU has significant and growing litigation risks.

   CSU NEED: Both students and faculty need a simple, user-friendly services to search, find, and acquire academic content across publishers and open resource services that provides content renderings which comply with accessibility requirements.

2. **Affordability of academic content:** The student and legislative demands to reduce the costs of academic content is a significant and growing demand and priority for the CSU. High costs of textbooks result in reduced access to a CSU education (students can't afford the total cost of education) and it reduces the quality and success of their education (students don't buy the required textbooks, don't learn the materials, and don't perform to their capabilities). The reduced access and quality of a CSU education costs the CSU significant funds by interfering with a student's ability to graduate in a timely and successful manner.

   CSU NEED: Both students and faculty need a simple, user-friendly services to search, find, and acquire academic content across publishers and open resource services that provides more affordable and valued options.

3. **Choice of academic content**: A students' educational success is dependent upon many complex factors. One significant class of factors that effects instructional and learning success is the quality and compatibility of the learning content to the learning needs of the students. Current practices significantly restrict faculty choice of academic content for teaching their courses and student choice of academic content for learning. The growing availability of multimedia tutorials that include individualized assessment of student learning needs (e.g. ALEKS) are not easily found, reviewed, and selected through the current textbook selection process.

   CSU NEED: Both students and faculty need simple, user-friendly services to search, find, and acquire academic content across publishers and open resource services to meet their individual teaching and learning needs.

4. **Digital delivery of academic content:** To serve the educational needs of Californians, the CSU is initiating a program to expand its online degree programs. The online nature of CSU degree programs will provide significantly greater access to the working professionals in California. Our professional doctoral programs and masters degree programs are ones that will particularly require online delivery. Currently, the CSU (or other higher ed institutions) does not have an effective, efficient, scaleable, sustainable, affordable, and secure means to deliver publisher content in digital/online formats to its students. Books, coursepacks, manuals, and other academic content are still frequently sold to students through local bookstores, requiring online students to become on-campus students for some and sometimes deal-breaking time.

   CSU NEED: Both students and faculty need simple, user-friendly services to search, find, and acquire digital academic content across publishers and open resource services to meet their individual teaching and learning needs.

5. **Leveraging teaching expertise and instructional practices to improve academic effectiveness and efficiencies.** The expert selection of academic content in the design of effective course curriculum occurs pervasively in the CSU but is not efficient and as reliable as it could be. There are a variety of circumstances where the faculty assigned to teach a course have not been provided the time or the support to select the high quality academic content and organize the content into effective course curriculum. Newly hired tenure track or adjunct faculty given a new teaching assignment two weeks before the semester starts would greatly benefit from a library of academic content already in use by their colleagues. Each semester, students are challenged to learn skills and concepts which might be better enabled by some academic resources beyond those assigned by the faculty. There is not effective, efficient, scaleable, or sustainable mechanism for students to share what enables their learning.

   CSU NEED: Both students and faculty need a simple, user-friendly services to search, find, and acquire academic content and expert advice across publishers, faculty, students, and open education services that enable them to effectively and efficiently learn from the experiences and expertise of others in teaching and learning.

Digital Marketplace:
A Services Solution to Multiple CSU Needs

The Digital Marketplace is being designed with the needs of faculty and students focusing our efforts. The following narrative will describe how faculty and students will be able to fulfill their teaching and learning needs through the Digital Marketplace services.

FACULTY ROLE

DISCOVERY:
Professor Plum logs into his LMS during the summer to begin to build the collection of resources he will want his students to use in the Biology 101 course he's teaching in the fall. It's been 5 years since he taught the introductory level course so he's interested in reviewing what's available in the field. Within the LMS website, he goes to the page for building his resource list and clicks on "Search for Resources". He types in a key concept he'll be covering in the course and a hit list of materials from 6 different publishers is generated along with free materials from MERLOT. The descriptions of the materials includes title, author, abstract, publisher collateral, type of resource (book, article, multimedia, etc), indication of its ability to be rendered in an accessible (section 508 compliant) format, and the different delivery formats and prices (hard copy text book, custom book, eBook to own, eBook to rent).

While looking for instructional content, Professor Plum also examines some of the professional development resources he can use help him prepare to teach successfully. He finds a number of handbooks on teaching the net-generation and he selects one for his summer reading, which CSULB gets a discount because of a bulk purchase.

PREVIEW:
Professor Plum selects 10 different recourses to review in more detail. He clicks on the PREVIEW button and a window pops ups indicating that since he is a faculty in good standing at CSULB, he will have full electronic access to the eBook for a 72-hour period, starting whenever he wishes. After previewing 10 materials, he selects 5 for his course, a textbook, and a chapter from another book, a tutorial on using EXCEL, and 2 multimedia simulations. He also gets to preview the net-generation handbook as well.

SELECTION:
Profession Plum saves his selections of materials for his students and writes notes (annotations) about the resources he's selected to use. He notices that the book, chapter, and tutorial can be rendered in an accessible format but the 2 multimedia simulations are only 80% accessible. Professor Plum contacts the campus Center for Students with Disabilities to learn what he needs to do to provide alternative curriculum to the visually impaired student he'll have in his class. Finally Professor Plum examines the "student view " of the resource list and sees that the textbook is offered in an eBook-to-own version for 50% of the hard copy text and the eBook-to-rent is only $15.99 for the semester. With all these options for access to the materials, he's hoping all his students will use the materials.

BUY:
Professor Plum puts the net-gen book in his shopping cart and buys it with his credit card

STUDENT ROLE

BUYING INSTRUCTIONAL RESOURCES:
When Jane Student gets access to the LMS for her Biology 101 course, she navigates to the Resource List to check out what she'll need to buy. As a student with a vision disability, she has had a challenge of getting the materials in a format she can use in a timely manner. She reviews the resource list and sees that the textbook and tutorial are in an accessible format and is pleased. She then reviews the different types of style sheets CSULB has certified has rendering the content in an accessible manner. She likes the choices and decides on the size, contrast, colors, and layout that suits her needs. Jane is considering becoming a biology major so she decides to put the eBook-to-buy in her shopping cart and the tutorial in her shopping cart. She buys the resources online with her credit card and stores the resources in her campus ePortfolio. For the two multimedia resources, there's a note for her stating that the CSULB Center for Students with Disabilities will provide an aid to work with Jane on the portions of these resource that are not accessible to her.

In the 4th week of the semester, Jane realizes she's having trouble with one of the key concepts in biology. She goes to the Digital Marketplace in her LMS and searches for additional materials that might do a better job in helping her learn the concept. She finds a student workbook that has the background information she needs and it can be rendered in the accessible format she prefers. Jane buys it online.

BUYING STUDENT DEVELOPMENT RESOURCES:
While Jane was looking for her course materials, she saw that the resource list also include a collection of online materials that could help her learn more about the different jobs you can get with a biology degree, expected salaries, and different types of professional opportunities. She also sees that the State of California provides forgivable student loans for students who go into teaching in California schools. Being a CSULB student, she can preview the career development material for 3 hours. Jane likes to book and adds it to her shopping cart. She also sees an e-handbook on how to succeed in college without going broke. She also puts this in her shopping cart and buys the materials with her credit card.

Digital Marketplace:
An Infrastructure Solution Enabling Many CSU Initiatives

Recent technology innovations have become proven practices which significantly reduce operational overhead for developing and maintaining the services and signficantly improve quality, customizability and effectiveness of the services. The Digital Marketplace program is being built on these advances which include:

- Service Oriented Architecture (SOA) and community web services
- OSIDs which becomes a universal translator between software applications

The Digital Marketplace program is also developing innovative business practices that will transform the service and business models for the sharing and distribution of free and fee-based digital content. The CSU is currently managing an alliance of the following corporations in the development of the Digital Marketplace:

- Technology companies:
  - Oracle
  - CISCO
  - Sun
  - IBM
  - Harvestroad
  - Apple
  - Blackboard/WebCT
  - Desire2Learn
  - Angel
  - Microsoft
- Publishing Companies
  - Pearson
  - Thomson
  - McGraw Hill
  - Bedford Freeman Worth
  - Guinti
  - O'Reilly
  - Variety Books

The CSU is also managing an alliance of higher education institutions – MERLOT - who would be using the Digital Marketplace in time.

The Digital Marketplace will consist of:

1. Teaching-learning services which improve faculty and student success and satisfaction.
2. Technology services which are an integration of open standards-based applications delivering a customizable enterprise service.
3. Marketplace services which will make the digital marketplace services well known and well used by providing highly valued products and services.
4. Business services which enable all stakeholders to close their business.

Leveraging CSU Projects

Item	Purpose	Lead
Identity Management	Testing implementation of CSU Identity and Access Management Initiative	Bev Thorton
Accessibility	Provide an infrastructure to implement CSU policies	Mary Cheng
Electronic Core Collection, SFX, Metalib	Integration of CSU electronic library collection and search services into the LMS (Bb/WebCT)	Gordon Smith/Lisa Moske
MERLOT	Integration of free academic content	Gerry Hanley
Online Degree Programs	Provide service to deliver fully online programs	Hanley/TBD
Foundational Skills	Student purchases of online tutorials made simple	Jeff Gold
Textbook Affordability	Provide a service to implement programs	Regan Caruthers
LMS Strategic Planning	Provide greater access of academic content through usable webservice	Hanley/TBD
Academic Transformation	Provide access to full range of academic technology products to use in programs	Hanley/TBD